

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 **Claim 1 (currently amended):** A radio communications
2 apparatus having a transmission power control feature for
3 controlling the transmission power of said apparatus by
4 using a transmission power control bit transmitted from a
5 distant station to the apparatus, said apparatus
6 comprising:

7 a communication state detector which detects a
8 communication state based on the reception power of a
9 received signal transmitted from the distant station to
10 said apparatus; and

11 a transmission power control step range changer which
12 varies the calculates a variable power step amount of a
13 transmission power control step corresponding to based on
14 the transmission power control bit and also based on the
15 detected communication state, wherein

16 said apparatus increases or decreases a transmission
17 power of a transmitted signal to the distant station by the
18 varied calculated power step amount in response to the
19 transmission power control bit received from the distant
20 station.

1 **Claim 2 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a reception power change detector which
4 detects a change in reception power in a local station.

1 **Claim 3 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a distant station transmission power
4 change detector which detects a change in transmission
5 power in a distant station.

1 **Claim 4 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a control state detector which detects
4 the control state of the local station.

1 **Claim 5 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a local station transmission power
4 change detector which detects a change in transmission
5 power in the local station.

1 **Claim 6 (original):** The radio communications
2 apparatus according to claim 1, wherein said communication
3 state detector has a transmission power control bit change

4 detector which detects a change in said transmission power
5 control bit.

1 **Claim 7 (original):** The radio communications
2 apparatus according to claim 2, wherein said reception
3 power change detector has a reception power comparator
4 which compares a previous reception power with a current
5 reception power.

1 **Claim 8 (original):** The radio communications
2 apparatus according to claim 2, wherein said reception
3 power change detector has a fading pitch detector which
4 detects the fading pitch of reception power.

1 **Claim 9 (original):** The radio communications
2 apparatus according to claim 2, wherein said reception
3 power change detector has a reception power threshold
4 comparator which compares the reception power with a
5 predetermined threshold.

1 **Claim 10 (currently amended):** A transmission power
2 control method for a radio communications apparatus for
3 controlling transmission power of the apparatus by using a
4 transmission power control bit transmitted from a distant
5 station to the apparatus, said method comprising:

6 the apparatus having a communication state detecting
7 step which detects a communication state based on the
8 reception power of a received signal transmitted from the
9 distant station; and

10 the apparatus having a transmission power control step
11 range changing step which ~~varies the~~ calculates a variable
12 power step amount of a transmission power control step
13 corresponding to based on the [[a]] transmission power
14 control bit[[,]] received by the apparatus from the distant
15 station[[,]] and also based on the detected communication
16 state; and

17 said apparatus increasing or decreasing a transmission
18 power of a transmitted signal to the distant station by the
19 varied calculated power step amount in response to the
20 transmission power control bit.

1 **Claim 11 (currently amended):** The transmission power
2 control method for radio communications apparatus according
3 to claim 10, wherein said communication state detecting
4 step has a reception power change detecting step which
5 detects a change in reception power in a local station,
6 wherein said transmission power control range changing step
7 ~~changes~~ calculates the variable power step amount
8 ~~transmission power control range~~ depending on the detected
9 change in reception power.

1 **Claim 12 (currently amended):** The transmission power
2 control method for radio communications apparatus according
3 to claim 10, wherein

4 said communication state detecting step has a distant
5 station transmission power change detecting step which
6 detects a change in transmission power in a distant station
7 and a reception power change detecting step which detects
8 a change in reception power in a local station, wherein
9 said transmission power control step range changing
10 step ~~varies~~ calculates the power step amount of the
11 transmission power control step range depending on the
12 detected change in transmission power in the distant
13 station and the detected change in reception power in the
14 local station.

1 **Claim 13 (currently amended):** The transmission power
2 control method for radio communications apparatus according
3 to claim 10, wherein

4 said communication state detecting step has a control
5 state detecting step which detects the control state of a
6 local station, wherein

7 said transmission power control step range changing
8 step ~~varies~~ calculates the power step amount of the
9 transmission power control step range depending on the
10 detected control state.

1 **Claim 14 (currently amended):** A transmission power
2 control method for radio communications apparatus according
3 to claim 10, wherein

4 said communication state detecting step has a local
5 station transmission power change detecting step which
6 detects a change in transmission power in a local station
7 and a transmission power control bit change detecting step
8 which detects a change in the transmission power control
9 bit, wherein

10 said transmission power control step range changing
11 step varies calculates the power step amount of the
12 transmission power control step range depending on the
13 detected change in transmission power in the local station
14 and the detected change in the transmission power control
15 bit.

1 **Claim 15 (original):** The transmission power control
2 method for radio communications apparatus according to
3 claim 11 or 12, wherein

4 said reception power change detecting step has a
5 reception power comparing step which compares a previous
6 reception power with a current reception power, wherein

7 a change in reception power is detected based on the
8 comparison results of the reception power comparing step.

1 **Claim 16 (original):** The transmission power control
2 method for radio communications apparatus according to
3 claim 11 or 12, wherein
4 said reception power change detecting step has a
5 fading pitch detecting step which detects the fading pitch
6 of reception power, wherein
7 a change in reception power is detected based on the
8 detected fading pitch.

1 **Claim 17 (original):** The transmission power control
2 method for radio communications apparatus according to
3 claim 11 or 12, wherein
4 said reception power change detecting step has a
5 reception power comparing step which compares a previous
6 reception power with a current reception power and a fading
7 pitch detecting step for detecting the fading pitch of
8 reception power, wherein
9 a change in reception power is detected based on the
10 comparison results of the reception power comparing step
11 and the detected fading pitch.

1 **Claim 18 (original):** A transmission power control
2 method for radio communications apparatus according to
3 claim 11 or 12, wherein

4 said reception power change detecting step has a
5 reception power threshold comparing step for compares the
6 reception power with a predetermined threshold, wherein
7 a change in reception power is detected based on the
8 comparison results of the reception power threshold
9 comparing step.

1 **Claim 19 (previously presented):** A computer-readable
2 recording medium for storing a program for use by a
3 computer for executing the transmission power control
4 method for the radio communications apparatus according to
5 any one of claims 10 through 14.

1 **Claim 20 (new):** A transmission power control method
2 for controlling a transmission power of a signal
3 transmitted from a portable mobile device to a base
4 station, said method comprising the steps of:

5 detecting information about the reception power of a
6 signal transmitted from the base station to the mobile
7 device as received by the mobile device;

8 calculating a variable power step amount based on both
9 a transmission power control bit received by the mobile
10 device from the distant station and the detected
11 information; and

12 changing a transmission power of a transmitted signal
13 from the mobile device to the distant station by the
14 calculated power step amount.